CLAIMS

What is claimed is:

1. An actuator assembly comprising:

an actuator drivingly connected by a transmission path to an output member, said actuator being capable of moving said output member in a first direction from a rest condition to an actuated condition, and also being capable of moving said output member in a second direction from said actuated condition to said rest condition; and

an energy storing member, in which movement of said output member by said actuator in said first direction is assisted by said energy storing member and movement of said output member by said actuator in said second direction stores energy in said energy storing member.

2. The actuator assembly as recited in claim 1 wherein said actuator is operably connected to said energy storing member by at least a portion of the transmission path.

3. The actuator assembly as recited in claim 1 wherein said actuator assembly further comprises a retaining arrangement to releasably retain said actuator assembly in said rest condition.

4. The actuator assembly as recited in claim 3 wherein said retaining arrangement is partially provided by friction associated with at least one of said actuator, said transmission path and said output member.

5. The actuator assembly as recited in claim 3 wherein said retaining arrangement is provided by a detent arrangement.

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6. The actuator assembly as recited in claim 5 wherein said detent arrangement acts upon said output member.

7. The actuator assembly as recited in claim 6 wherein said detent arrangement acts substantially perpendicularly to a direction of movement of said output member.

8. The actuator assembly as recited in claim 3 wherein said retaining arrangement is a clutch arrangement.

9. The actuator assembly as recited in claim 8 wherein said clutch arrangement includes a pawl acting on said output member.

10. The actuator assembly as recited in claim 9 wherein said pawl is disengaged from said output member by a pawl disengagement ramp, said pawl disengagement ramp being a component of said transmission path.

11. The actuator assembly as recited in claim 10 wherein said component of said transmission path has a lost motion connection on said output member.

12. The actuator as recited in claim 8 wherein said transmission path includes a worm gear and a worm wheel.

13. The actuator arrangement as recited in claim 12 wherein said actuator is operably connected to said energy storage member by said worm gear and said worm wheel.

14. The actuator assembly as recited in claim 13 wherein said worm wheel includes a crank pin acting on said output member.

15. The actuator assembly as recited in claim 1 wherein said first and second directions of movement of said output member are linear.

16. The actuator assembly as recited in claim 1 wherein said first and second directions of movement of said output member are rotational.

17. The actuator assembly as recited in claim 1 wherein said energy storage member acts on said output member.

18. The actuator assembly as recited in claim 1 wherein aid energy storage member is a resilient member.

19. The actuator assembly as recited in claim 18 wherein said resilient member is a spring.

20. The actuator assembly as recited in claim 1 wherein said actuator assembly further comprises a housing which at least partially contains said actuator, said transmission path and said output member.